

LIST OF WESTERN AUSTRALIAN BIRDS COLLECTED  
BY MR. CAIRN, AND MR. W. H. BOYER-BOWER,  
AT DERBY AND ITS VICINITY, WITH REMARKS  
ON THE SPECIES.

BY DR. E. P. RAMSAY, F.R.S.E.

PART I.

MR. CAIRN'S COLLECTION.

The Australian Museum has recently become enriched by a fine collection of Birds from Western Australia, obtained at Derby and its vicinity by Mr. Cairn, who, it will be remembered, made some important zoological collections during 1882-3 in New Guinea.

The following is a list of the species which have already come to hand, for, unfortunately, two boxes containing a large portion of the collection are still missing.

1. *ASTUR APPROXIMANS*, *Vig. & Horsf.*

Although Gould has given the name of *Astur cruentus* to the western species I have not yet seen any specimens that can be distinguished from the birds known to us from Eastern Australia.

Salvadori (*Orn. Pap. et Molucc. I.* p. 60), places Gould's *A. cruentus* with Cuvier's *Falco (Urospizias) torquatus*, and my *Astur sharpei* and others; but in this I cannot concur.

Gould's *A. cruentus*, may be the same as the Timor bird, but it is certainly not identical with *A. sharpei*. The figures of *A. approximans*, given by Gould, (fol. Vol. I. pl. 17), have been taken from immature birds; when fully adult the bars in the under surface of the body are of a *rich vinous red*. Younger specimens closely resemble *Accipiter torquatus* in plumage (p. 1096).

2. HIERACIDEA ORIENTALIS, *Schleg.*3. HIERACIDEA BERIGORA, *Vig. & Horsf.*

Specimens of these birds, which are both smaller individuals than those from the eastern and southern parts of the continent, seem to prove that they may be one and the same species; one specimen has a pale, almost white, breast, and a remarkably rufous upper surface.

## 4. NINOX CONNIVENS-OCCIDENTALIS, n. sp.

Two specimens alike in plumage show a larger amount of white on the upper wing coverts, scapulars and hind neck, than in the N.S. Wales or Cape York specimens; the whitish bands on the tail do not reach the shaft of the feathers; all the under surface of the body white, with a distinct well-defined band of rufous brown down the centre of each feather; the outer webs of the primaries near the adjacent tips of the secondaries, have also a faint reddish tint; the face is almost white; length 15 inches, wing 12 inches, tail 6.8 inches, tarsus about 1.4 inch; the feet small, claws comparatively weak. I believe this will prove to be a distinct species, but must be compared with some of its New Guinea allies. For the present I place it as a western variety of *N. connivens*, which may be distinguished as *occidentalis*.

5. DACELO CERVINA, *Gould.*

This and its New Guinea representative *D. intermedia* (Salvad.) cannot be well separated from *D. leachii* (V. and H.)

6. HALCYON SANCTUS, *Vig. & Horsf.*

Slightly smaller, and of a clearer blue on the back than our N. S. W. specimens, with a narrow well-defined white collar and nuchal spot. Wing 3.6 inches, bill from nostril 1.5; total length 7 inches from the tip of the bill.

7. HALCYON PYRRHOPYGIA, *Gould.*

Same as the eastern form of this species, both in size and plumage.

8. *ALCYONE PULCHRA*, *Gould*.

Highly coloured specimens of this beautiful species, throat pure white, all the rest of the under surface of a deep rich coppery rufous ; flanks tinged with violet.

9. *ARTAMUS CINEREUS*, *Vieill*.

The young have the upper surface of the head and body mottled with ashy brown, the wings grey, rump and under tail-coverts black mottled with ashy white, the upper wing coverts and scapulars margined with ashy brown and the tips of all the quills with a distinct margin of white ; bill brown.

10. *ARTAMUS MINOR*, *Vieill*.

Similar in every respect to the Queensland specimens. Length 5·2 in., wing 3·9 in., tail 3·5 in.

11. *PARDALOTUS UROPYGIALIS*, *Gould*.

Several specimens of this well-marked species ; the sexes are alike in plumage. The young have the head mottled with brown, and the tips of the spurious wing-feathers of the *same red tint* as in the adult, the upper tail-coverts not so bright, but still brighter in tint than in the adult of *P. melanocephalus*, which this species resembles.

12. *PARDALOTUS RUBRICATUS*, *Gould*.

Similar in every respect to individuals from Central Queensland. This bird appears to be very plentiful a few miles inland from Derby ; it is very rarely found in N. S. Wales.

13. *CRATICUS ROBUSTUS*, *Lath*.

(*C. nigrogularis*, *Gould*.)

Similar to the N. S. Wales birds of this species.

14. *GRAUCALUS MELANOPS*, *Lath*.

The only difference, if any, from the eastern birds may be found in its slightly more swollen bill, which, however, may be accidental in the single specimen sent.

15. *CAMPEPHAGA HUMERALIS*, *Gould.*

One specimen only, immature.

16. *PACHYCEPHALA FALCATA*, *Gould.*

Many specimens; the young males are slightly more rufescent on the under surface than the females, which they otherwise resemble.

One adult male is slightly larger than the rest, and has a narrow line of white separating the black band on the chest from the rufous breast.

17. *COLLYRIOCINCLA BRUNNEA*, *Gould.*

Two specimens only, one adult and one immature female with light brown bill, which in the adult is quite black.

We have received specimens which we believe belong to this species, from Port Essington and Port Darwin, both adults and young; it is not improbable that Mr. Sharpe's *C. pallidirostris* may be an immature example of this species.

18. *MIMETA AFFINIS*, *Gould.*

This I hold to be a good species notwithstanding the remarks of other authors, who have probably not seen an authentic specimen.

19. *POMATOSTOMUS RUBECULUS*, *Gould.*

Differs from *P. temporalis* in being smaller, and by having the breast of a deeper tint.

20. *MYIAGRA CONCINNA*, *Gould.*

The feathers on chin and throat are more erect and slightly deeper in tint, than in its ally *M. plumbea*.

21. *RHIPIDURA SETOSA*, *Q. & Gaim.*

The young birds have the tips of the wing-coverts above, and the secondaries margined with buffy white. The abdomen light buff.

22. *MICRÆCA ASSIMILIS*, Gould.

Two adults and one young. The young have only an indication of the brown on the breast; some of the upper wing-coverts, and spurious wings tipped with white; the tips and outer margins of the secondaries and scapulars, and the ends of the primaries margined with white; the under tail-coverts, abdomen, flanks, and outer two tail-feathers all white.

23. *SMICRORNIS FLAVESCENS*, Gould.

Apparently common, several specimens sent; this I believe is the smallest bird in Australia.

24. *MELANODRYAS PICATA*, Gould.

Two adult males. Mr. James Ramsay obtained this species in the interior of N. S. W., near Cobar, where it is rare.

25. *PÆCILODRYAS CERVINIVENTRIS*, Gould.

This bird appears to be rare; specimens obtained at some distance inland from the coast do not differ in any way from Gould's figure. (Birds of Aust., Suppl., pl. 15.) The measurements, however, are slightly larger than those of the type given by Mr. Sharpe. (Brit. Mus. Cat. Vol. IV., p. 242.)

26. *MALURUS CORONATUS*, Gould.

Several specimens of this beautiful and rare species were obtained inland. I believe these are the first recorded since the types described by Mr. Gould were obtained.

27. *MALURUS CRUENTATUS*, Gould.

I cannot agree with Mr. Sharpe (Brit. Mus. Cat. Bds. Vol. IV. p. 297) that Lewin's *Sylvia dorsalis* is identical with the present species; Lewin's birds came from N. S. Wales, being obtained on the Paterson River, and are undoubtedly the *Malurus melanocephalus*, V. & H., as figured by Gould, fol. Vol. III. pl. 26. The measurements also agree. Gould's *M. cruentatus* is much smaller,

and was obtained in N. W. Australia. I hold that *M. Brownii*, V. & H. (Trans. Linn. Soc. XV. p. 223) may be the same as Gould's *M. cruentatus*, but is certainly not Lewin's *Sylvia dorsalis*. The facts are that *Malurus melanocephalus* has the back orange-red, and is found as far south as the Clarence and Richmond Rivers. It is stated to have been obtained on the Upper Hunter and Paterson Rivers, and extends to the Dawson River, Queensland. As we go further north and reach the Burdekin and Herbert Rivers, the birds are of a deeper tint, *almost of a blood-red* on the back; this variety is found inland as far as the Norman River and Port Essington, whence I have obtained specimens; still further west on the northern coast at Port Darwin and Derby the birds become deepest in colour, and of a *clear blood-red* on the back. (See notes on Mr. Boyer-Bower's collection, p. 1,100.)

#### 28. CISTICOLA sp?

Mr. Cairn has sent only one specimen, probably because the species was plentiful, but it appears to me to be distinct from *C. ruficeps*, or else a remarkably well bleached specimen, the under surface being silky and almost *white*, the head alone slightly tinged with buff, the tail light brown with a faintly defined subterminal spot of dark brown, margined on the tips of the feathers with pale buff.

#### 29. PTENÖEDUS RUFESCENS, Vig. & Horsf.

One immature specimen, female, similar in every respect to N. S. Wales specimens.

#### 30. ESTRELLA ANNULOSA, Gould.

This species is confined, as far as I know, to the north-western portion of the continent; and is still rare in collections even in this country. Wing 1·9 to 2 inches, tail 2 to 2·2 inches.

#### 31. ESTRELLA RUFICAUDA, Gould.

Does not extend further south than Central Queensland.



32. ESTRELLA PHAETON, *Homb. & Jacq.*

I have not found this species south of Port Denison.

33. ESTRELLA CASTANOTIS, *Gould.*

Extends its range to South Australia. All three species appear to be plentiful in Western Australia.

34. DONACICOLA PECTORALIS, *Gould.*

Several specimens; I have also received this species and *Poëphila leucotis* from the Gulf of Carpentaria District.

35. POËPHILA ACUTICAUDA, *Gould.*

A fine series of this beautiful species. Mr. Alex. Morton found this species at Port Darwin, and Mr. Gould gives Port Essington as the locality from which the types were obtained. I have not met with it in collections from the Gulf Districts.

36. POËPHILA MIRABILIS, *Homb. & Jacq.*37. POËPHILA GOULDIAE, *Gould.*

I am not yet quite satisfied that these species are really distinct, but as we have specimens now breeding in our aviaries, I hope the time is not far off when this matter will be settled. It is only fair to say that I have failed to mate adults of the *red-headed* phase with the *black-headed varieties*, but both have been captured from the same troop. I am inclined to believe that the *young males* and the *females* of both these so-called species are alike in colour, both having black on the forehead and face, and light *dull plum coloured* breasts. If they are to be considered as distinct species, this is the only solution of the question, but it must be remembered that we have one variety with *bright golden yellow*, instead of *red* or *black* on the face and forehead. *Poëphila cincta*, Gould, is also breeding readily in confinement in and about Sydney.

38. *EMBLEMA PICTA*, *Gould*.

It was quite refreshing to meet with skins of these beautiful birds, the first obtained, I believe, since Mr. Gould described the types. The adult females become with age almost brick-red on the upper surface of the body; the crimson colouring on the face and down the breast and abdomen is not attained, even in the male, until after the second or third year, perhaps later.

39. *STIGMATOPS SUBOCULARIS*, *Gould*.

Those who will take the trouble to compare veritable specimens of *S. ocularis*, Gould, with the present species, will at once see the differences pointed out by Mr. Gould, and the distinction between these two species. Dr. H. Gadow (Cat. Bds. Brit. Mus. IX., p. 214), admits it to be of a distinct race, if not a good species. In its many forms it is found all over Australia, Aru Islands, New Guinea, and the Malay Archipelago.

40. *PTILOTIS SONORA*, *Gould*.

This species has a most extensive range being found all through the interior and southern provinces.

41. *PTILOTIS FLAVESCENS*, *Gould*.

Apparently plentiful in West Australia; found also in the Gulf districts.

42. *STOMIOPERA UNICOLOR*, *Gould*.

This species is not rare at Cape York, and is also found near Normantown in the Gulf of Carpentaria district.

43. *ENTOMOPHILA RUFUGULARIS*, *Gould*.

I have received this species and also *E. albogularis*, from the Norman River, Port Essington, Port Darwin, and West Australia in general.

44. *PHILEMON SORDIDUS*, *Gould*.

The specimens sent by Mr. Cairn agree well with those described by Gould, but with them must be compared the young sent by Mr. Boyer-Bower described hereafter. (See p. 1098.)



45. MELITHREPTUS ALBOGULARIS, *Gould.*

This is evidently the northern and western representative of *M. lunulatus*, but is quite distinct from, and must not be confounded with the next very distinct species, *M. lætior* (Gould).

46. MELITHREPTUS LÆTIOR, *Gould.*

Dr. Hans Gadow has confused this species with *M. gularis*, Gould., from which it is very distinct, probably because he has had only a single specimen to judge from. A large series now before me plainly shows that the two species are quite distinct from one another, their size and colouring being unvarying. I have received it from the Norman River and other parts of the interior.

47. DICEÛM HIRUNDINACEUM, *Shaw.*

This species is universally dispersed over the whole of Australia ; feeds on berries and fruits of various kinds, but seems to prefer those of the *Loranthus*, of which we have in Australia so many varieties if not species, and of a *Viscum* (*V. aureum*), which is only found as a parasite on the *Loranthus* ; this plainly accounts for the distribution of the *Loranthus* and *Viscum* all over the districts frequented by the *Dicæum*, and in which it is locally known as the Mistletoe Bird. The eggs are *white, without spots or markings of any kind*, sometimes elongated ; an average specimen measures 0·65 × 0·45 inch, an elongated one 0·7 × 0·47 inch.

48. CLIMACTERIS MELANURA, *Gould.*

Found all over the Gulf district, also at Port Essington, and apparently distributed over the whole of the north-west coast. Eggs similar to those of *C. scandens*, but slightly smaller. Mr. James Ramsay, obtained specimens about 30 miles west of Cobar. The female differs from the male in having the throat white, the lower portion being tinged and margined with rufous. None of our specimens show white markings on the flanks, as figured by Mr. Gould.

49. SITTELLA LEUCOPTERA, *Gould.*

This is apparently a common species ; several specimens of both sexes obtained.

50. CUCULUS INORNATUS, *Vig. & Horsf.*

Apparently plentiful, and extending over the whole of the continent.

51. MESOCALIUS PALLIOLATUS, *Lath.*

(*Chalcites osculans*, *Gould.*)

This species, though nowhere plentiful, appears to be distributed over the whole of Australia. Specimens from N. S. Wales and South Australia do not appear to differ from those from the N. W. coast.

52. SCYTHROPS NOVÆ-HOLLANDIÆ, *Lath.*53. CENTROPUS MELANURUS, *Gould.*

Both species apparently plentiful ; it is doubtful if *C. melanurus* is specifically distinct from *C. phasianus* of N. S. Wales.

54. CACATUA GYMNOPIA, *Sclater.*

I have received this species from the interior provinces, the Gulf District, and Port Darwin ; it ranges therefore over the whole of the interior and the N. W. Coast of Australia.

55. CACATUA ROSEICAPILLA, *Viell.*

The specimens of this species received from the N. W. Coast appear to be stunted, being slightly smaller than those found in N. S. W.

56. CALOPSITTACUS NOVÆ-HOLLANDIÆ, *Gml.*

Found also throughout the Gulf district, as well as in the interior provinces, both north and south.

57. PTISTES COCCINEOPTERUS, *Gould.*

A smaller and more intensely coloured race than those called *Ptistes erythropterus*, of N.S.W. which it otherwise resembles.

58. TRICHOGLOSSUS RUBRITORQUIS, *Vig. & Horsf.*

Apparently a very common species, taking the place of *T. Nova Hollandiae* of N. S. W. In the young specimens the bill is almost black, the collar round the hind neck narrow, and mottled with light yellow; the breast is also washed with orange instead of red.

59. TRICHOGLOSSUS VERSICOLOR, *Vigors.*

A northern species extending as far south as the Gulf district (Norman River), and found over the whole of the northern and western coasts.

60. LOPHOPHAPS LEUCOGASTER, *Gould.*

It is highly gratifying to meet with a fine series of this rare and well marked species. Sub-Inspector Armit, late of the Native Police, Queensland, obtained specimens in the neighbourhood of Normantown, Gulf District, and forwarded a set of the eggs, which I described as those of *L. ferruginea*. The nest is placed on the ground and, like that of *Geophaps scripta*, consists merely of a few blades of grass lining a slight hollow on the lee side of a tussock or tuft of grass. Eggs 4 in number for a sitting; of a pale cream colour. Length, 1.05 × 0.8 inch.

61. GEOPELIA PLACIDA, *Gould.*62. STICTOPELIA CUNEATA, *Lath.*

Both apparently common, the former *G. placida*, having a slightly deeper tint of rose on the under surface; the latter *S. cuneata* appears to be more numerously spotted with white dots on the wing-coverts, than in the eastern individuals of this species.

63. HIATICULA NIGRIFRONS, *Cuv.*

Evidently plentiful and universally distributed all over Australia, frequenting margins of fresh-water streams, lakes, dams, &c. Eggs three in number.

64. THRESKIORNIS STRICTIPENNIS, *Gould.*

65. ARDEA NOVÆ-HOLLANDIÆ, *Lath.*

66. TADORNA RADJAH, *Garnot.*

None of these differ from eastern individuals of the same species.

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PART II.

MR. T. H. BOYER-BOWER'S COLLECTION.

In addition to the 66 species just enumerated, I have been permitted to examine a fine collection made by T. H. Boyer-Bower, Esq., in the vicinity of Derby. All the specimens were obtained within twenty-five miles of the coast, and although this collection contains a larger number of species than that made by Mr. Cairn, we miss the rare forms apparently characteristic of the interior. This want is somewhat compensated by the additional species which we are enabled to enumerate.

67. CIRCUS ASSIMILIS, *Jard. & Selb.*

(*Circus Jardini*, Gould, Birds of Aust. fol. Vol. I. pl. 27.)

A very highly coloured individual in full plumage.

68. HALIASTUR SPHENURUS, *Vieill.*

69. MILVUS AFFINIS, *Gould.*

70. FALCO LUNULATUS, *Lath.*

71. TINNUNCULUS CENCHROIDES, *Vig. & Horsf.*

(1. bis) ASTUR APPROXIMANS, *Vig. & Horsf.*

Mr. Boyer-Bower's collection contained a large series of this last-named species in different stages of plumage, none of which, however, can be considered identical with Gould's *Astur cruentus*.

72. *STRIX DELICATULUS*, *Gould.*

Similar to the N. S. W. individuals of the species.

73. *PODARGUS GOULDII*, *Masters.*

Like all the members of this genus, this species varies remarkably in the tints and colour exhibited in its plumage; in size it agrees best with *P. phalenooides*, but on reference to Mr. Masters's description it will be seen that the two species are decidedly different. (See P. L. S. N. S. W., Vol. 1, p. 45.)

74. *EUROSTOPODUS GUTTATUS*, *Vig. & Horsf.*

The specimens here under consideration belong to some of the numerous varieties of *E. guttatus* of Vigors and Horsfield. The predominant colouring of the upper surface, especially on the wings and their coverts is of a rich rufous, the under surface also is highly coloured with the same tint; front and centre of the head richly mottled with rufous and black; under tail-coverts light rufous, the tail below with from 19 to 20 alternate bars of black and rufous, the upper surface of the tail-feathers freckled and barred with ashy grey and rufous, also barred with black, all the feathers being distinctly margined and tipped with rufous. In a second specimen the rufous markings are not so prominent, the large white wing-spot is confined to the first four primaries, inner primaries with a rufous tip.

Length  $11\frac{1}{2}$  inches, wing 8.4, tail 6.4.

75. *MEROPS ORNATUS*, *Lath.*

It would be interesting to ascertain the exact date when they arrive in Western Australia, as in their habits they more nearly approach truly migratory species than any other Australian birds.

76. *HALCYON MACLEAYI*, *Jard. & Selb.*

Similar to the New South Wales birds.

77. *SEISURA NANA*, *Gould.*

A smaller species than *S. inquieta*, but having a comparatively larger bill; female slightly tinged with yellow on the chest. Wing, 3.4 inches; tail, 3.3; bill from forehead, 0.8.

78. GERYGONE ALBOGULARIS, *Gould.*

Similar to the New South Wales birds. A specimen said to be the young of this species, has a decided wash of yellow on the head and throat, is slightly different in the markings on the tail, and may prove to be the young of a distinct species.

79. MIRAFRA HORSFIELDII, *Gould.*

Slightly deeper in tint than individuals from N. S. Wales.

80. CINCLORAMPHUS CRURALIS, *Gould.*

Mr. Gould speaks of this as a distinct species under the name of *C. cantillans*, but I have never yet met with any specimens which I could specifically separate.

Both varieties are found in N. S. Wales, and in South and West Australia.

81. PTILOTIS NOTATA, *Gould.*

A bird plentiful all over Australia north of the Herbert River, very variable in size, and in the extent of the yellow marks on the ear-coverts; the smallest I identify as Mr. Gould's *P. gracilis*, which is found as far south as Cardwell.

## 82. PHILEMON sp?

The specimens here referred to may be the young of *P. argenticeps*; they certainly are not the young of *P. citreogularis* which they resemble, but have an ashy grey patch behind the ear-coverts on the side of the neck, and a narrow line of the same tint on the hind neck; on the sides of the neck is a distinct patch of citron yellow, and the cheek is slightly tinged with the same; throat silvery white, with a dark brown or blackish band extending from the ear-coverts, below it a narrow bare line extends from the nostrils over the eye. There is also a narrow triangular bare space behind it; all the feathers of the wings, their coverts, and of the inter-scapular region are margined with ashy white.

83. ENTOMOPHILA ALBOGULARIS, *Gould.*

This species extends into the Gulf country and interior provinces of Queensland, where, however, it is rare.



84. MYZOMELA PECTORALIS, *Gould.*

This species is, during some seasons, plentiful in the neighbourhood of Cairns and Cardwell, where I found it breeding in 1873-74. Specimens from Cape York and Derby do not differ from those found further south. The young differ materially in plumage from the adults.

85. CHALCITES BASALIS, *Horsf.*

Similar to other members of the species.

(54 bis). CACATUA GYMNOPSIS, *Sclater.*

Found also in the Gulf District, where it is tolerably plentiful. It belongs to the sub-genus *Licmetis* rather than to *Cacatua*.

86. CALYPTORHYNCHUS NASO, *Gould.*

Quite the same as others from King George's Sound.

87. PHAPS HISTRIONICA, *Gould.*

Several specimens in adult plumage of this well-marked species.

88. SYNOICUS AUSTRALIS, *Lath.*

Same as the eastern form of this species.

89. LOBIVANELLUS MILES, *Bodd.*

(*L. personatus*, *Gould.*)

This appears to be a common species in the district, and similar to the Cape York birds. Its range extends as far south on the east coast as Cooktown, its southern representative being found as far as the Herbert River "Valley of Lagoons."

90. ERYTHROGONYS CINCTUS, *Gould.*

An inland species, but evidently dispersed over the whole of Australia; it is plentiful in the southern provinces of the interior

91. RECURVIROSTRA RUBRICOLLIS, *Temm.*92. HIMANTOPUS LEUCOCEPHALUS, *Gould.*

These species are found over the whole of Australia, both on the coast line and in the interior, and are most plentiful on the inland lakes of the southern districts.

93. PLATALEA REGIA, *Gould.*94. ARDEA PACIFICA, *Lath.*95. DENDROCYGNA VAGANS, *Eyton.*

Evidently dispersed over the whole of Australia.

96. STERNA ANGLICA, *Mont.*

(*Gelochelidon macrotarsa*, Gould).

This species is nowhere plentiful in Australia, except during the breeding season in the interior of N. S. Wales.

97. STERNA FRONTALIS, *Gray.*

(*Sterna melanorhyncha*, Gould).

Found all over the coast line of Australia.

This brings the species known from the Derby district, including a radius of about 100 miles inland, up to 97 species.

On the arrival of further collections daily expected, I hope to be able to add a more complete list of the birds from these districts in a future paper, with more particulars as to the exact localities from which they were obtained.

## MALURUS CRUENTATUS BOWERI.

(?) *Malurus cruentatus*, *juv.* Gould.

Among an interesting series of red-backed wrens I find the skin of a young individual which has a few crimson feathers on the shoulder, back, and rump; the remainder and upper tail-coverts and flanks are light fawn colour; wings and tail-feathers brown margined with fawn; throat and abdomen white, the sides and adjacent flank feathers and thighs tinged with cinnabar-red, under tail-coverts light fawn colour; bill brown; an ashy spot in front of the eye; two or three of the outer tail-feathers tipped with light fawn colour or light brown. This may, hereafter, be proved to belong to a distinct species, and, if so, should bear the name of its discoverer, Mr. Boyer-Bower, *Malurus cruentatus Boweri*.